ICFO



The Graphene Flagship enters new stage

Advancing towards future market opportunities

September 04, 2018

The Graphene Flagship was launched in 2013 with the mission to take graphene and related layered materials from academic laboratories to society, revolutionize multiple industries and create economic growth and new jobs in Europe. After 5 years, the Flagship consortium has successfully completed the Core1 phase and is progressing smoothly towards more applied phases. It is on its way to achieving its objective of developing the high potential of graphene and related 2D materials to the point of having a dramatic impact on multiple industries.

The Reviewing Panel thoroughly examined the results obtained in this Core1 phase and concluded that for many topics, there has been a clear transformation of the activities, moving from individual research projects to genuine collaboration towards larger goals - exactly what a Flagship project should aim for. Nearly all milestones and key performance indicators have been met, often exceeding expectations. There are numerous examples of

significant scientific and/or technological achievements, with clear progress beyond the state of the art. The Work package on Photonics and Optoelectronics led by ICREA Prof. at ICFO Frank Koppens was recognised as one of the closest to being brought into industrial exploitation due to its significant potential for both scientific breakthrough and innovation.

As the Flagship heads into the Core2 phase, a number of so-called Spearhead projects- application focused projects motivated by future market opportunities- are also taking off. Related topics range from integration of graphene into 5G communications and the internet of things, to novel batteries, solar farming and flexible (bio)-electronics.

Another development being ushered in with Core2 is the launch of the Network of Business Developers. The business developers are the key players in creating the network connecting the research efforts to industry. Their tasks include scouting developing technologies from within the Flagship and identifying industry trends, needs and roadmaps. ICFO is hosting one of the business developers, who will be devoted to the portfolios of Photonics and Optoelectronics and Flexible and Wearables technologies.